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09/822,853	04/02/2001	Hyun-doo Shin	Q59547	7185

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EXAMINER

LE, BRIAN Q

ART UNIT PAPER NUMBER

2624

DATE MAILED: 06/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/822,853

Applicant(s)

SHIN ET AL.

Examiner

Brian Q. Le

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 14-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **Response to Amendment and Arguments**

1. Applicant's amendment filed May 10, 2006, has been entered and made of record.
2. Applicant's arguments with regard to claims 14-29 have been fully considered, but are not considered persuasive because of the following reasons:

The Applicant argues (page 9 of the Remarks) that the "Patent Office **continues to ignore** the limitation related to determining dissimilarity without requiring any intervention from the user". The Applicant asserted that Chang Reference requires user intervention during the calculation of dissimilarity thus does not teach the newly added limitation "wherein a computation of the textual dissimilarity does not require any input from a user". The Applicant also cited the support for this limitation at FIG. 2, steps 202, 204, 206, 208 and pages 6-8 of the disclosure.

On behalf of the Patent Office, the Examiner is hereby attempting to fully address this discussion. First, FIG. 2, steps 202, 204, 206, 208, do not show that the computation of the textual dissimilarity does not require any input from a user. FIG. 2 merely teaches the steps of **computing dissimilarity**. Similarly, pages 6-8 of the specification do not have disclosure for this limitation. The Applicant is further invited to clearly show the support for this limitation, page number and line number. As clearly indicated by the MPEP 2161, 35 U.S.C. 112, first paragraph, specification must have:

"The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such **full, clear, concise, and exact terms** as to enable any person skilled in the art to which it pertains, or with which it is most nearly

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connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.” [emphasis added]

Clearly, the disclosure does not have full, clear, concise and exact terms to show the support for “a computation of the textual dissimilarity does not require any input from a user”.

Also, the newly added limitation “where a computation of the textual dissimilarity does not require any input from a user” is a negative limitation. The Examiner is providing the Applicant the following guideline regarding negative limitation; see MPEP 2173.05(i):

“Any claim containing a negative limitation which does not have basis in the original disclosure should be rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Note that a lack of literal basis in the specification for a negative limitation may not be sufficient to establish a prima facie case for lack of descriptive support. *Ex parte Parks*, 30 USPQ2d 1234,1236 (Bd. Pat. App. & Inter. 1993). See MPEP § 2163 - § 2163.07(b) for a discussion of the written description requirement of 35 U.S.C. 112, first paragraph.”

In addition, the Examiner is providing the MPEP guideline regarding “automatic” activity claim; see MPEP 2144.04:

“*In re Venner*, 262 F.2d 91, 95, 120 USPQ 193, 194 (CCPA 1958) (Appellant argued that claims to a permanent mold casting apparatus for molding trunk pistons were allowable over the prior art because the claimed invention combined “old permanent-mold structures together with a timer and solenoid which automatically actuates the known pressure valve system to release the inner core after a predetermined time has elapsed.” The court held that broadly providing an automatic or mechanical means to replace a

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manual activity which accomplished the same result is not sufficient to distinguish over the prior art.).”

Regarding Chang Reference, it teaches the system accept user queries (page 930, column 2, 2<sup>nd</sup> paragraph) and respond back to user. This is an addition intelligence layer added to the automatic computation of dissimilarity and has nothing to do with the human intervention during dissimilarity computation processing. Chang clearly teaches an automatic dissimilarity computation by a metasever/computer through out the reference specifically at Introduction, page 926, column 2, second paragraph, “...statistical features describing the links between databases and templates are **pre-computed**...”; pages 929-930, 3.2 Metadatabase, “...At the time that a database registers with the metasever, the metadata ...expected query form, specialized algorithms supported, and statistically metadata.”; page 930, first column, first paragraph. Even though, the Examiner has spelled out the locations to show the automatic computation of dissimilarity in Chang Reference. The Applicant is invited to further consider the entire reference in detail to comprehend the teaching.

Thus, the rejections of all of the claims are maintained.

### ***Claim Rejections - 35 USC § 112***

3. Claims 14-25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Regarding claims 14, 19, 21, the Applicant needs to cite the support for the newly

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added limitation “wherein a computation of the textual dissimilarity does not require any input from a user”. Please cite exact page number and line number.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 14-17, 19, 21-24, and 26-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Chang, “Data Resource Selection in Distributed Visual Information Systems”, I.E.E.E. Knowledge and Data Engineering, Volume. 10, pages: 926-946 November 1998.

Regarding claim 14, Chang teaches a method of measuring the textural similarity of images, the method comprising:

Automatically (page 927, column 2, last paragraph and page 930, column 2, second paragraph, “the templates, distribution ... the metadata will support efficient on-line retrieval of image queries”) determining a statistical dissimilarity ( $d(i,j)$ ) between the images ( $i,j$ ) (similarity measure/computation between input and template images) (Page 928, column 2, last two paragraphs); and automatically determining a textural dissimilarity ( $D(i,j)$ ) using said statistical dissimilarity ( $d(i,j)$ ) (Page 932), characterized by determining a perceptual dissimilarity (visual dissimilarity) between the images (Page 926, column 2, second paragraph) and the influence of said statistical dissimilarity ( $d(i,j)$ ), on the textural dissimilarity ( $D(i,j)$ ), being dependent on a function (based on factor) of the perceptual dissimilarity (Page 938, first column, first paragraph) where  $d$  is a function whose value is dependant on a range and magnitude of the perceptual

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dissimilarity (mean and variances of similarity distribution) (page 921, column 1, first paragraph).

Referring to claim 15, Chang teaches a method wherein determining the perceptual dissimilarity (Page 926, column 2, second paragraph) comprises:

Determining quantitative measurements of the textural regularity of the respective images (Page 932, second column); and determining the difference between said quantitative measurements (Fig. 3 and page 929, first column).

For claim 16, Chang also teaches a method wherein the textural dissimilarity is a value proportional to the statistical dissimilarity when the perceptual dissimilarity is not larger than a predetermined threshold (Page 929, second column).

Regarding claim 17, Chang discloses a method wherein the degree of influence of the statistical dissimilarity of the textural dissimilarity ( $D(i,j)$ ) is determined in dependence on the magnitude of the perceptual dissimilarity when the perceptual dissimilarity is greater than a predetermined threshold (similarity between a range of threshold is greater than a predetermined threshold) (page 928, second column, third column).

For claim 19, please refer back to claim 14 for the teachings and explanations. In addition, Chang teaches a computer-readable recording medium storing a computer program for the aforementioned limitation (server, database and software) (abstract).

For claim 21, please refer back to claim 14 and claim 19 for further teachings and explanations.

For claim 22, please refer back to claim 15 for the teachings and the explanations.

For claim 23, please refer back to claim 16.

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For claim 24, please refer back to claim 17.

For claims 26-29, please refer back to claims 14-17 respectively for the teachings and explanations.

***Allowable Subject Matter***

6. Claims 18, 20, and 25 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.



**Contact Information**

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Q. Le whose telephone number is 571-272-7424. The examiner can normally be reached on 8:30 A.M - 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on 571-272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BL  
June 15, 2006

JINGGE WU  
PRIMARY EXAMINER

